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THE ANALYSIS OF THE ORAL PROFICIENCY SKILLS OF THE THREE SPECIALIZATION MAJORS IN THE RESEARCH COURSE

Lanuza MH[1]*, Rizal AG[2] and Alba SP[3]

[1]*Office of the Vice President for Research and Innovation, City College of Calamba, Philippines*
[2,3]*English Cluster, Department of Teacher Education, City College of Calamba, Philippines*

Abstract: The research course, oral thesis defense abilities determined research success. Text and defense go together. Panel examiners reviewed 34 English, Mathematics, and Science student papers for Teacher Education's secondary education thesis proposal defense. Advisors, researchers, and three-panel examiners—the chairman, data analyst, field expert, and technical expert—rated the work. ANOVA parametric test was used since the normality scale p-value is 0.968 and the variances in all five areas—organization, content, speaking skills, question response, and confidence and personality—are more than 0.05. Comparison of oral proficiency to specialization course. Student specialization did not affect oral proficiency (p=0.075, mean=66.90%), however three of five were relevant. Content, answers, confidence, and personality varied by expertise. Scheffe's assessment indicated that third-year Math and Science students performed equally in oral proficiency but differently from English majors. It's amazing that English huge research groups fared worse than the two. The program needs improve since English majors may struggle in the three areas. All three majors had the same organization (p=0.060, mean=67.06%) and speaking ability (p=0.096, mean=65.29) since the other three categories were great but not significant. The study may help research facilitators, advisers, the department, and the research office boost student research by focusing on thesis defense oral abilities.

Keywords: oral proficiency, content, organization, responses to questions, speaking skills, confidence

Introduction

For people to succeed in a variety of academic and professional settings, effective communication skills—especially oral proficiency—are essential. In the realm of education, teachers are expected to possess excellent oral proficiency to effectively convey information, engage students, and facilitate meaningful learning experiences.

The ability to communicate effectively in oral presentations is a crucial skill for college students, especially those pursuing careers in teaching and education. In the context of the City College of Calamba's Department of Teacher Education in Secondary Education, it is essential to assess the oral proficiency of Third Year College students during their thesis defense performances.

However, in the digital age, researchers have easy access to a variety of ICT tools that help in conducting literature reviews, gathering and analyzing data, and organizing their research findings overall. These tools help researchers communicate their findings in a clear, organized manner that improves the readability and comprehension of their written reports. The nuances and complexities of

*Corresponding Author's Email: *mhlanuza@ccc.edu.ph*

the research process may not always be captured in a well-written report, nor may it give readers a complete picture of the researcher's area of expertise.

This is where oral proficiency in thesis defense becomes essential. Researchers can verbally present and discuss their findings during a thesis defense in front of an audience or judging panel. It necessitates that researchers clearly and succinctly express their research goals, techniques, findings, and conclusions. Researchers have the chance to successfully communicate the value of their research, showcase their subject-matter expertise, and exercise critical thinking through oral presentations.

Oral proficiency in thesis defense goes beyond the written paper by allowing researchers to engage in real-time discussions, answer questions, and provide additional explanations or justifications for their research choices. It gives judges a way to gauge how well-rounded the researcher's expertise is, how well-equipped they are to defend their conclusions, and how well-versed they are in the subject matter of the study. Additionally, it enables a more thorough investigation of the researcher's perceptions, interpretations, and contributions to the subject.

Furthermore, oral proficiency in thesis defense adds a human element to the research process. It gives researchers the chance to display their personality, self-assurance, and interpersonal abilities, which are frequently essential in both professional and academic settings. Effective oral communication helps researchers collaborate, network, and spread their findings to a wider audience in addition to improving their credibility.

The COVID-19 pandemic has had a tremendous impact on the student's particular academic trajectory, which is the basis for this study. Since the start of the epidemic, educational institutions throughout the world have embraced remote learning as a way to guarantee academic continuity. As a result, since their first semester as first-year students, the Third Year College students of the City College of Calamba have been fully engaged in remote learning. However, as they have progressed to their third year, the learning engagement setup has shifted to face-to-face instruction.

The question of whether there is a gap in oral proficiency as a result of the change from remote to face-to-face learning environments is prompted by this considerable shift in learning modalities.

This research aims to examine the oral proficiency of Third Year College students from the City College of Calamba's Department of Teacher Education in Secondary Education. It does so by analyzing how well they performed during their thesis defenses in five key areas, namely organization, content, speaking skills, response to questions, and confidence and personality. Additionally, the study seeks to examine the potential influence of student's major field of specialization (English, Math, and Science) on their oral proficiency.

By examining the oral proficiency of Third Year College students, this research will contribute to understanding the impact of remote learning engagement on their ability to effectively communicate in oral presentations. Likewise, a thorough examination of their oral skill levels can be done by assessing their thesis defense performances in six important areas. These six areas have been selected to assess several facets of oral communication, such as planning abilities, content delivery, efficient

use of visual aids, general speaking abilities, capacity to answer inquiries, and the display of personality and confidence.

Furthermore, this study aims to investigate the potential role of students' major fields of specialization in their oral proficiency. It seeks to examine if there are any notable disparities in the oral competence levels of students majoring in English, Math, or Science. The goal of the research is to ascertain whether oral proficiency varies depending on the subject by examining and comparing the results of students from various discipline, (Lanuza, 2023)

The results of this research are anticipated to contribute valuable insights to the field of education, particularly about the growth of oral proficiency. The outcomes may influence how curricula are designed, how teaching methodologies are delivered, and how assessments are conducted, ultimately improving the standard of teacher education programs. Additionally, this research may provide evidence-based recommendations to bridge any potential gaps in oral proficiency resulting from the transition between online and in-person learning engagements.

In conclusion, when ICT technologies unquestionably transformed the research process and enhanced the clarity and structure of research papers, but they cannot entirely replace the requirement for oral competency in thesis defense. Researchers can show off their in-depth knowledge, defend their research decisions, and participate in lively conversations through oral presentations. Strong oral communication skills and well-written papers ensure that researchers may successfully express their subject-matter expertise and make significant contributions to their respective disciplines. By examining their thesis defense performances in various areas and exploring the impact of their major field of specialization, this research could shed light on potential gaps in oral proficiency resulting from the transition between remote and face-to-face learning engagements. The results of this research could contribute to the improvement of teaching and learning strategies, ultimately benefiting the students' academic and professional development.

Objectives of the Study

This article investigates the oral proficiency in research defense of secondary teacher education students with different specializations i.e. the Mathematics Education major, Science Education major and English Education major after being exposed to two and half years of modular, and pure online instructions. The areas considered were proficiency in delivering organization, content, speaking skills, response to questions, confidence and personality, and appropriate use of the visual aids in defending their research topic. The study also tested the comparison of the specialization orientation as possibly a factor in improving oral proficiency.

Framework of the Study

The following research paradigm reflected the study flow.

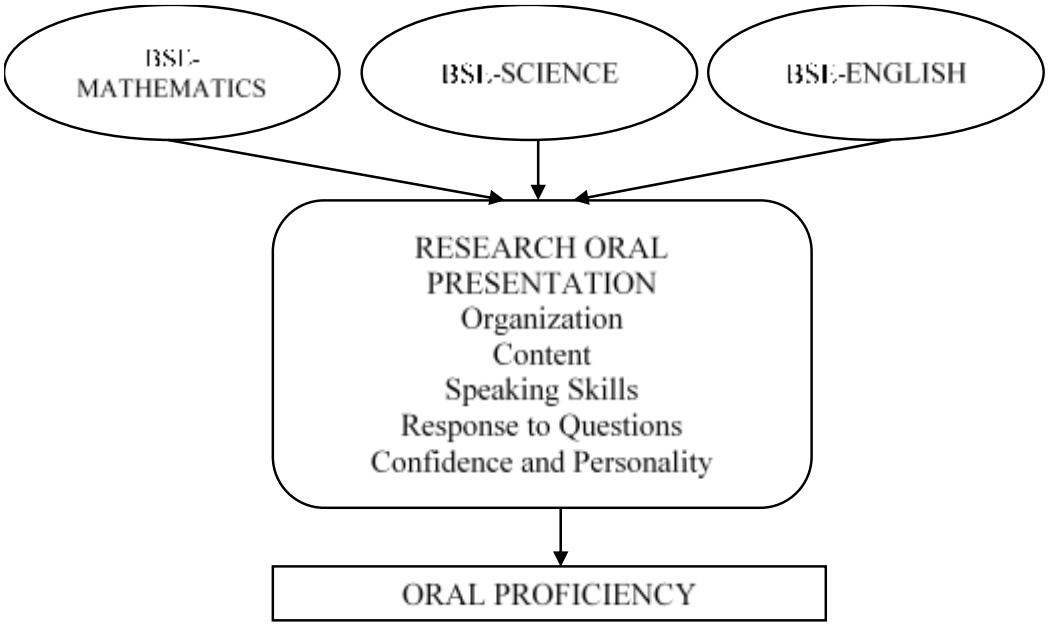

Figure 1. The Research Paradigm

Methodology

This section presents the entire methodology of the study, including the research design, setting, sampling, participants of the study, tools utilized, the technique of data collection, statistical measures applied, and ethical considerations

Research Design

The competency level of teacher education students with various specializations was tested using a descriptive comparative research design, which was considered adequate. To find any differences or patterns, this design compares and contrasts students' oral proficiency across a range of specializations. It enables researchers to outline and examine the variations in oral competence levels between various groups, giving them a thorough picture of the total language abilities present in the teacher preparation program. This comprehensive introduction to language evaluation ideas and procedures is taken from Michigan State University (2023). Although it does not concentrate directly on the oral proficiency of students in teacher education, it provides useful information about language assessment that can be applied to this research design.

Research Locale

One of the local colleges in Laguna that offers a thesis-teacher education program with specializations in English, Mathematics, and Science served as the study's research location. As evidenced by its modest beginnings in the research area, one of the quad focal functions of higher education institutions (HEIs), the college continues to be committed to its mandate to strengthen research, and one initiative is to assess its oral proficiency in evaluating the oral defense of student research papers. Also, this College ensures education continuity in 2020 through modular instruction, online instruction in 2021 until mid of 2022 and now blended learning since July 2022 to present, the

students especially in the teacher education program might develop gaps in oral proficiency. Hence, the study chose the City College of Calamba.

Sampling and Respondents of the Study

The third-year students in the CCC's Bachelor of secondary education (BSE) program make up the study's population. They were picked because they were in the year level for the course on education research. Since the study oral defense was graded by a group, the group considers oral presentation rather than an individual analysis. Eight (23.5%) groups from the BSE-Math program, seven (20.6%) from the BSE-Science program, and nineteen (55.9%) from the BSE-English program had their research defenses last first semester of the academic year 2022-2023. The population under examination consisted of 34 groups in total with 3 or 4 members in each group making up the total number of groups.

Instruments

The instrument of the study is a department rubric the teacher education is using since 2018. It has six criteria in rating the oral defense of the group researchers including content on how the presenters were able to communicate complex ideas and level of scientific rigor; organization involves the sequence and flow of topic arrangement, response to a question if it is in an in-depth manner, adequate or with difficulty, speaking skills describes eloquence, fluidity, clear communication with the audience; and confidence and personality if with enthusiasm, poise and assurance in which cannot be determined if remote thesis defense. Each criterion used a range of numerical ratings 5 if it exceeds expectations, 3 to 4 if it meets expectations, and 1 to 2 if it does not meet expectations. One criterion in the oral defense score was omitted since visual aids criteria have less to do with oral proficiency.

Data Gathering Procedure

During the first week of the last semester, the departmental thesis defense for the teacher education program was held. Given a 20-minute presentation and an additional 20 minutes for questions and answers, the defense processes typically lasted 40 minutes to 1 hour. The experts who evaluated the scores came from the official list that had been approved by the Office of the Vice President for Research and Innovation (OVPRI) and had been vetted for their suitability as members of the thesis panel. Given that all of the research was focused on education, the panel's members included the chairperson for overall quality assessment, a data analyst—either a statistician or a qualitative data coder—depending on the type of research, and a technical or field expert to examine the paper's structure or the study's interventions. Along with the ratings of the research facilitator and adviser, all three ratings from the panel members were taken into account.

Data Analysis

To describe the performance of the group of researchers per criterion, the frequency count, percent, arithmetic mean, and standard deviation were used. The normality scale p-value is 0.968, and the homogeneity of variances across all five areas of consideration—organization, content, speaking skills, response to questions, confidence, and personality—is all greater than the alpha value of 0.05. Therefore, the ANOVA parametric test was used. In the case that at least one mean differs from one

other, Scheffe's test was used to determine which among the mean's performance in each specialization is different.

Ethical Considerations

Ensuring ethical standards in research is essential. To maintain the integrity of the study, some ethical guidelines were followed. All participants were first given a thorough explanation of their rights and the goals of the study before being asked for their consent. Only aggregate data were shared; participant names and other private information were kept anonymous. Also, since data is already available for analysis, no individual names or groups of researchers were exposed since the study accepts the Data Privacy Act of 2012 and adheres to the moral guidelines provided by the City College of Calamba.

Results and Discussion

The discussions were presented according to the chronological arrangement of the research problems.

1. The Research Oral Defense Performance of the Secondary Teacher Education Students.

Table 1. The Frequency Distribution of Oral Defense Scores by the Third Year Teacher Education Students in Terms of Content.

`	BSE-Math		BSE-English		BSE-Science	
	f	%	f	%	f	%
Exceeds Expectation (81-100%)	1	12.5	0	0.0	2	28.6
Meets Expectations (41-80%)	6	75.0	17	89.5	5	71.4
Does not meet Expectations (20-40%)	1	12.5	2	10.5	0	0.0
Total	8	100.0	19	100.0	7	100.0
Mean	63.3		58.25		77.1	
Standard Deviation	19.52		17.33		8.48	
Level	Meets Expectation		Meets Expectation		Meets Expectation	

The information reveals in Table 1 that while all third-year students delivered oral theses that met expectations, there were variations in their mean scores according to specialization. The average score for BSE-Math students was 63.3. BSE-English students received a score of 58.25. BSE-Science students achieved a mean score of 77.1 on average. The students' level of material knowledge in their different fields can be blamed, at least in part, for these discrepancies. Students with solid subject-matter knowledge may talk with assurance, give complete examples and explanations, and respond to inquiries in-depth during oral presentations (Golish, 1999). Students in BSE-Science, who earned the highest mean scores, probably understood the scientific principles that underpinned their theses better. Due to this, they were able to properly present their thoughts and research results during their oral defense.

In contrast, BSE-English students may have had more difficulty explaining the subtleties of literary analysis and interpretation required in an English thesis because they received the lowest overall scores. Even though they fulfilled the minimum standards, it was probably more difficult for them to

fully explain their ideas and analyses during the oral presentation part because they didn't fully understand the course material. Higher levels of subject understanding are associated with higher average scores, suggesting that material mastery plays a significant effect on students' mean performance on thesis oral presentations. Students' oral proficiency and self-confidence can be strengthened by bettering their comprehension of course material and specialty topics.

Table 2. The Frequency Distribution of Oral Defense Scores by the Third Year Teacher Education Students in Terms of Organization.

`	BSE-Math		BSE-English		BSE-Science	
	f	%	F	%	f	%
Exceeds Expectation (81-100%)	1	12.5	2	10.5	4	57.1
Meets Expectations (41-80%)	6	75.0	15	79.0	3	42.9
Does not meet Expectations (20-40%)	1	12.5	2	10.5	0	0.0
Total	8	100.0	19	100.0	7	100.0
Mean	65.0		62.46		81.9	
Standard Deviation	21.31		18.62		9.2	
Level	Meets Expectation		Meets Expectation		Exceeds Expectation	

The data in Table 2 shows the mean performance of third-year students in thesis oral presentations across three majors: BSE Math, BSE English, and BSE Science. While BSE Math and BSE English students met expectations with mean scores of 65.0 and 62. 46 respectively, BSE Science students exceeded expectations with a mean score of 81.9.

Numerous research has revealed the importance of logical subject sequencing and idea structuring for successful oral proficiency. Organization and structure were among the most significant aspects, according to Hamouda's (2013) investigation of the factors influencing oral presentations by Saudi EFL students. Students who organized their information in a logical, coherent order with obvious breaks between portions performed better. In a similar vein, Khany and Khosravi (2017) examined Iranian university students and discovered that organization, rather than substance or fluency, was the best predictor of oral competence results.

According to Al-Twairesh (2016), successful organizing entails defining main themes in a logical order, employing smooth transitions between sections, and summarizing the most important aspects. This makes it simple for the audience to understand the main points of the presentation. The BSE Science students most likely received higher grades as a result of their thesis oral presentations being more organized. The performance of the other majors might be enhanced by placing more emphasis on organization, structure, and coherence.

Table 3. The Frequency Distribution of Oral Defense Scores by the Third Year Teacher Education Students in Terms of Speaking Skills.

`	BSE-Math		BSE-English		BSE-Science	
	f	%	f	%	f	%
Exceeds Expectation (81-100%)	0	0.0	0	0.0	1	14.3
Meets Expectations (41-80%)	7	87.5	17	89.5	6	85.7
Does not meet Expectations (20-40%)	1	12.5	2	10.5	0	0.0
Total	8	100.0	19	100.0	7	100.0
Mean	61.67		62.11		78.1	
Standard Deviation	19.76		18.2		5.04	
Level	Meets Expectations		Meets Expectations		Meets Expectations	

Interpreting the mean performance scores of third-year students in their thesis oral presentation reveals that speaking skills were meeting expectations but with room for improvement. The data in Table 3 shows that BSE Math students achieved a mean score of 61.67, BSE English 62.11, and BSE Science 78. 1 out of 100.

According to research, speaking abilities including eloquence, fluency, and clear audience communication is crucial for oral competency. According to a 2021 study, evaluators assessed oral presentation participants as more effective communicators when they talked more fluently and eloquently (Williamson, 2021). Another 2011 study found that students who made eye contact with their listeners and spoke at the right volume and tempo received higher grades for oral presentations, (Coursera, 2023).

Recent studies have continued to emphasize the importance of speaking abilities. According to a 2017 article, students who practiced and rehearsed their oral presentations to increase speech fluidity and explanation clarity outperformed students who did not (Thomas, 2017). The author concluded that oral proficiency involves more than just content knowledge—it also involves the ability to effectively communicate that knowledge to an audience.

In summary, based on the mean performance scores, it appears that students could benefit from further practice in public speaking to enhance their ability to communicate their theses orally. The ability to speak at an acceptable tempo, maintain eye contact, and practice material to guarantee fluent and clear explanations could improve performance ratings in the future.

Table 4. The Frequency Distribution of Oral Defense Scores by the Third Year Teacher Education Students in Terms of Response to Questions.

`	BSE-Math		BSE-English		BSE-Science	
	f	%	f	%	f	%
Exceeds Expectation (81-100%)	0	0.0	2	10.5	3	42.9
Meets Expectations (41-80%)	7	87.5	17	79.0	4	52.1
Does not meet Expectations (20-40%)	1	12.5	2	10.5	0	0.0
Total	8	100.0	19	100.0	7	100.0
Mean	60.0		59.65		79.05	
Standard Deviation	19.52		17.7		9.76	
Level	Meets Expectations		Meets Expectations		Meets Expectations	

Interpretation about the mean performance of the third-year students in thesis oral presentation focusing on response to questions. The data in Table 4 shows that BSE- Math received a mean score of 60.0, and BSE- English received 59. 65 while BSE-Science received 79.05, all falling within the "meeting expectations" range. Response to questions in an in-depth manner plays an important role in oral proficiency, as referenced in recent studies.

A 2018 study found a strong correlation between higher assessments of oral communication efficacy and students' capacity to offer full and extensive responses during question-and-answer sessions in oral presentations (Yang, 2018). The author examined 120 oral presentations made by undergraduate students and discovered that evaluators gave higher marks to students who responded to questions with greater detail, examples, and explanations.

According to a 2020 study as mentioned in the newsletter of Coursera (2023) students were regarded as having better oral communication skills when they gave thorough responses that went beyond memorization of information and demonstrated a deeper comprehension of the subject matter. The most crucial component in differentiating higher-performing student presenters from average student presenters, according to the author's poll of 30 instructors who evaluated more than 500 student presentations, was the answer to questions.

Taken together, these studies show that students who can respond quickly to questions and give insightful, in-depth answers during the question part of oral presentations are often seen as better communicators and speakers. Thus, a key metric for assessing the proficiency and effectiveness of the third-year students' oral presentations is their mean response performance to questions.

Table 5. The Frequency Distribution of Oral Defense Scores by the Third Year Teacher Education Students in Terms of Confidence and Personality.

`	BSE-Math		BSE-English		BSE-Science	
	f	%	f	%	f	%
Exceeds Expectation (EE) (81-100%)	1	12.5	2	10.5	3	42.9
Meets Expectations (ME) (41-80%)	6	75.0	17	79.0	4	52.1
Does not meet Expectations (DNME) (20-40%)	1	12.5	2	10.5	0	0.0
Total	8	100.0	19	100.0	7	100.0
Mean	64.17		62.81		82.86	
Standard Deviation	21.06		18.5		6.51	
Level	Meets Expectations		Meets Expectations		Exceeds Expectations	

The presented data in Table 5 shows the mean scores of third-year students from three majors on their thesis oral presentations. While students from the BSE-Math and BSE-English majors scored below the meeting expectations threshold with means of 64.17 and 62.81 respectively, the BSE-Science students exceeded expectations with a mean score of 82.86.

Confidence and personality were likely key factors in these outcomes. Studies have linked oral competence during thesis defenses with students' level of confidence. According to a 2023 newsletter

by Joanna Hong, undergraduate students who were more confident in their speaking skills scored better during their thesis oral examinations. Moreover, this article found that students who were perceived by their professors as being more extroverted and confident performed better on their thesis oral defenses than their more introverted colleagues (Hong, 2023).

In a nutshell, the data shows that BSE-Science students exceeded expectations during their thesis presentations due to higher levels of confidence and positive personality attributes. Training to build students' self-confidence and polish their communication skills to enhance their performance on upcoming thesis defenses would probably be beneficial for the other majors.

Table 6. The Frequency Distribution of Oral Defense Scores by the Third-Year Teacher Education Students in Oral Presentation Performance

Oral Proficiency`	BSE-Math		BSE-English		BSE-Science	
	Mean	Level	Mean	Level	Mean	Level
Content	63.3	ME	58.25	ME	77.14	ME
Organization	65.0	ME	62.46	ME	81.9	EE
Speaking Skills	61.67	ME	62.11	ME	78.1	ME
Response to Questions	60.0	ME	59.65	ME	79.05	ME
Confidence and Personality	64.17	ME	62.81	ME	82.86	EE
Mean	65.97		62.4		80.16	
Standard Deviation	21.52		17.38		6.23	
Level	Meets Expectations		Meets Expectations		Meets Expectations	

Oral proficiency means the performance of the third-year students in thesis oral presentation in five areas of consideration namely content, organization, speaking skills, response to questions, and confidence and personality shows room for improvement. The data in Table 6 indicates that while the BSE-Math students scored a mean of 65.97 and BSE- English students scored 62.4, meeting expectations, BSE-Science students scored 80.16, also meeting expectations. Improving performance in these five areas can help students better prepare for their oral defenses.

Students must present clear, well-structured information that demonstrates a thorough understanding of their research topic (Knoch, Rouhshad, Oon, & Storch, 2015) which is somewhat evident in the content performance of all specialization majors of the teacher education degree programs. A strong literature review and a clear description of the methodology are critical. In terms of organization, all three Mathematics, English, and Science major students had an organized structure with a clear introduction, body, and conclusion whereas Iwashita, Brown, McNamara, & O'Hagan (2008) helps make the content easier for the audience to follow. The speaking skills level of the three majors were in the “meeting expectations” where to Graham, Milanowski, & Miller (2012) students should speak at an appropriate pace, use clear pronunciation, and avoid filler words to keep the audience engaged. Response to questions may be less developed in remote learning through meeting standards, still quite at far to exceeding expectation level. Students should anticipate questions the audience may have and prepare responses that provide additional detail and clarity (Huxham, Campbell, & Westwood, 2012). Lastly, for confidence and personality area, Students should exhibit confidence through proper eye contact, gestures, and a calm demeanor to establish credibility with the audience (Knoch et al. 2015),

in which Science major students exceeded those expectations way further than Mathematics and English major students.

1. The comparison of the mean oral presentation performance when grouped according to Specializations

Table 7. The Comparison of Oral Proficiency Areas of the BSE Third year students in Research Oral Defense

Areas	F-value	p-value	Decision	Remarks
Content	3.329*	0.049	Reject Ho	Significant
Organization	3.090	0.060	Failed to Reject Ho	Not Significant
Speaking Skills	2.533	0.096	Failed to Reject Ho	Not Significant
Response to Questions	3.613*	0.039	Reject Ho	Significant
Confidence and Personality	3.510*	0.042	Reject Ho	Significant
Oral Proficiency	2.821	0.075	Failed to Reject Ho	Not Significant

**significant at 5%*

The data showed in Table 7 on the mean performance of third year students across five areas of consideration in their thesis oral presentation reveals that BSE Math students achieved a mean score of 65.97, BSE English students scored 62.4, and BSE Science students scored 80.16. All three groups met expectations overall. However, the English major group performed the lowest compared to the other two majors in content, response to questions, and confidence and personality. This suggests the English program needs to improve in these three areas to match the performance of the other majors.

The findings of this study reveal a nuanced picture of oral thesis defense performance among Teacher Education students across different specializations. While overall oral proficiency did not significantly differ between English, Mathematics, and Science majors ($p = 0.075$), a closer examination of specific performance areas unveiled critical distinctions. Notably, significant differences emerged in content ($p = 0.049$), response to questions ($p = 0.039$), and confidence/personality ($p = 0.042$), indicating that specialization does indeed influence these specific aspects of oral defense.

These results highlight a potential literature gap. While much research has focused on general oral presentation skills and thesis writing competencies, fewer studies have specifically examined the interplay between subject specialization and the nuanced performance areas within the oral defense context. The significant differences observed in content, question responses, and confidence/personality suggest that the demands and expectations of these areas may vary across disciplines. For instance, the ability to articulate complex mathematical or scientific concepts concisely and accurately during the defense might present unique challenges compared to the presentation of literary analyses or pedagogical approaches. Similarly, the nature of questions posed by examiners and the level of confidence required to address them may differ based on the specialization. This is consistent with studies that suggest discipline-specific discourse communities influence communication styles (Hyland, 2004).

Conversely, the lack of significant differences in organization ($p = 0.060$) and speaking skills ($p = 0.096$) across specializations suggests that these foundational aspects of oral presentation may be more universally applicable or perhaps reflect a more consistent level of training across the program.

This finding contrasts with some existing literature that might suggest variations in these skills based on discipline-specific communication norms. For example, some researchers have argued that scientific presentations tend to prioritize data presentation and logical structure, while humanities presentations may focus more on rhetorical persuasion (Swales, 1990). However, the borderline significance of organization may imply that further study with a larger sample size may yield significant results.

The unexpected finding of English majors performing less proficiently in content, question responses, and confidence/personality compared to their Mathematics and Science counterparts warrants further exploration. This contradicts some assumptions that English majors, with their presumed strength in verbal communication, would excel in oral defenses. This disparity points to a potential gap in the literature regarding the specific challenges faced by English majors in research-oriented oral presentations, particularly in the context of teacher education. Future research should delve into the specific factors contributing to this disparity, such as differences in research methodology, content complexity, or perceived expectations. This aligns with calls for more discipline-specific approaches to academic literacy development (Lea & Street, 1998).

In conclusion, this study contributes to the literature by highlighting the importance of examining specific performance areas within oral thesis defenses, rather than relying solely on overall proficiency scores. It underscores the need for tailored interventions that address the unique challenges faced by students in different specializations. Furthermore, it reveals a potential gap in understanding the specific difficulties faced by English majors in research-based oral presentations, paving the way for future research to explore these complexities.

All three majors performed at a good level in organization and speaking skills, with no significant differences between them (organization: p=0.060; speaking skills: p=0. 096; and oral proficiency in general: p=0.075). The assumption that English students would have an edge in oral presentation due to their major is not supported in this study as they performed the lowest in the three significant areas mentioned, as mentioned by Cao (2018), oral proficiency may be developed regardless of your special field of interest since one shall be exposed to speaking, hence proficiency in areas especially in research has to be developed. Also, from the study of Lanuza (2017), one of the thrusts in an outcomes-based education is that not only focusing in a single field of expertise but also a multi-variety of skills, perhaps mathematics major students shall not be only expert at numbers but with speaking too, same with science majors. In the same manner, English majors should develop scientific rigor and reasoning not only writing and speaking.

Conclusion and Recommendation

In conclusion, the study found that the oral proficiency of students in defending their thesis proposals played a pivotal role in their research success. Both the written manuscript and the oral defense complement each other. There are variations in the mean scores of third-year students' oral theses based on their specialization. The differences in mean scores can be, at least in part, attributed to the students' level of material knowledge in their respective fields. Students with solid subject-matter knowledge are more likely to deliver confident presentations, provide complete examples and explanations, and respond to inquiries in-depth during oral defenses. Students who organize their information in a logical, coherent order with clear breaks between sections tend to perform better in

oral presentations. Due to their thesis oral presentations being more organized compared to students from other majors, BSE Science students likely obtained higher grades. Moreover, strong correlations have been found between higher assessments of oral communication efficacy and students' ability to provide full and extensive responses during question-and-answer sessions in oral presentations. Students that respond to questions in greater depth, with more examples, and with more explanations typically receive higher grades from evaluators. Thorough responses that demonstrate a deeper comprehension of the subject matter beyond memorization are considered indicators of better oral communication skills. While, the mean performance scores of third-year students in their thesis oral presentations indicate that their speaking skills were meeting expectations but with room for improvement. Higher marks for oral presentations have been linked to factors like making eye contact with listeners, speaking at the right volume and tempo, and practicing the presentation. But, the mean scores of third-year students in thesis oral presentations varied across the three majors: BSE Math, BSE English, and BSE Science. Confidence and positive personality attributes, such as extroversion, likely played a significant role in the outcomes of the thesis oral presentations. Students perceived as more extroverted and self-assured by their professors typically perform better in thesis oral defenses. Despite that, the oral proficiency of third-year students in thesis oral presentations across the areas of content, organization, speaking skills, response to questions, and confidence and personality shows room for improvement. Effective thesis oral presentations require a thorough comprehension of the research issue, exhibited through concise and well-organized content. All three majors - Mathematics, English, and Science - demonstrated organized structures in their presentations, indicating an understanding of the importance of clear introductions, body, and conclusions. Overall, it appears that all three majors—BSE Math, BSE English, and BSE Science—met expectations based on the third-year students' mean performance in their thesis oral presentations across five criteria (content, organization, speaking skills, response to questions, and confidence and personality). English majors' performance in these three key areas—content, answer to questions, and confidence and personality—indicates a need for development in order to catch up to the other majors' performance. The assumption that English students would have an edge in oral presentation skills due to their major is not supported by this study. The findings indicate that oral proficiency can be developed regardless of the major, emphasizing the importance of developing multi-variety skills across disciplines. Conducting longitudinal studies or experimental interventions to improve oral proficiency is suggested for further studies.

Recommendations

The following are the recommendations offered based on the summarized findings and conclusions drawn.

1. Regularly evaluate students' progress throughout their thesis preparation and provide constructive feedback to assist them improve their oral presentation skills. To improve their presentation skills even more, encourage students to actively seek feedback from their peers, teachers, or advisors to further enhance their presentation abilities.

2. Develop guidelines or templates that students can use as a framework for structuring their oral presentations. These tools can assist students in organizing their content and ensuring a logical progression of ideas throughout their presentations.

3. Faculty members should provide guidance and feedback to students regarding the organization and structure of their oral presentations. Encourage faculty to emphasize the importance of logical sequencing and offer suggestions for enhancing the content's overall organization.

4. Incorporate regular practice sessions dedicated to oral presentations in the curriculum. These sessions should focus not only on the content but also on the organization and structure of the presentations, allowing students to refine their skills over time.

5. Conduct mock question-answer sessions as part of the preparation for oral presentations. This will provide students the chance to practice answering a range of questions and get feedback on the clarity, depth, and coherence of their responses.

6. Introduce activities and strategies aimed at boosting students' self-confidence in their capacity for oral presentations. Workshops on public speaking, practice sessions for presentations, and methods for dealing with nervousness are a few examples. Foster a supportive and encouraging environment that lifts students' confidence.

7. Continuously assess and evaluate students' oral proficiency in all majors, with an emphasis on the identified areas that need improvement. Use the data gathered to inform instructional strategies and make necessary adjustments to curriculum and training programs.

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Declaration of Interest Statement

The authors declare that they have no conflict of interest.

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